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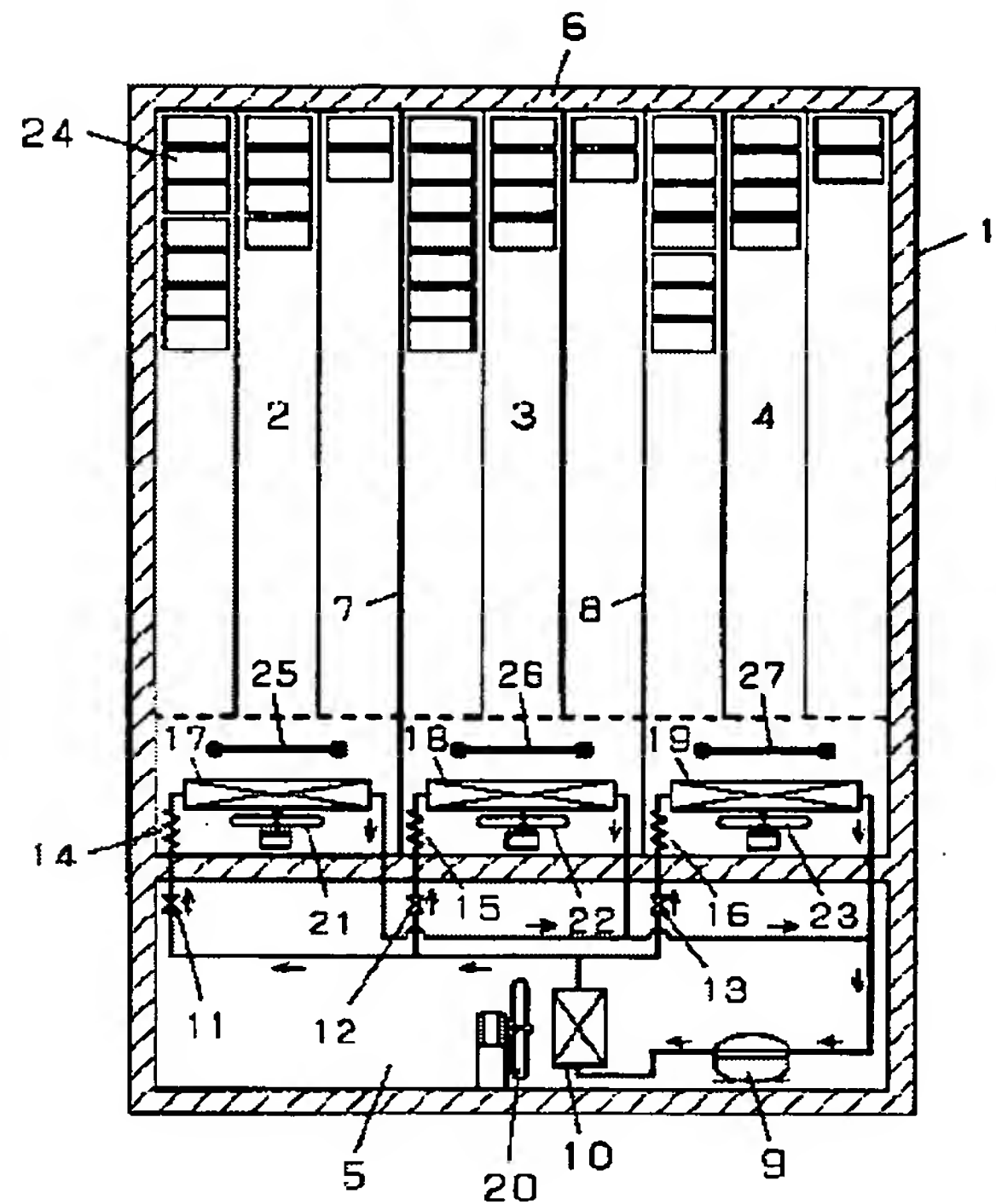
APPLICANT : MATSUSHITA REFRIG CO LTD;

INVENTOR : KUSAKA MICHIOYOSHI;

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TITLE : COOLING/HEATING APPARATUS AND
VENDING MACHINE USING THE SAME

2, 3, 4 庫内
17, 18, 19 蒸発器
21, 22, 23 庫内ファン
24 販売商品
25, 26, 27 加温ヒータ



ABSTRACT : PROBLEM TO BE SOLVED: To provide a cooling/heating apparatus which can safely cool and heat even when a combustible refrigerant is used.

SOLUTION: A value obtained by dividing a heating amount of heaters 25, 26 and 27 which form a substantially columnar shape due to their Joule heats by effective heat transfer surface areas of the heaters 25, 26 and 27 is set to substantially 2 W/cm² or less. Thus, even when no air supply occurs, surface temperatures of the heaters 25, 26 and 27 do not excessively rise. Even when the combustible refrigerant is leaked, possibility of igniting the refrigerant is extremely low. When as the refrigerant, a single refrigerant of R600a or R290 or a mixed refrigerant of R600a and R290 is adopted, the combustible refrigerant can be not only easily acquired, but also characteristics such as an ignition temperature or the like can be easily specified.

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